

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A ground-fault detecting device, comprising:
 - a power source, electrically insulated from a vehicle body;
 - a pulse signal generator, generating a pulse signal having a high level and a low level which ~~are appeared~~ appear repeatedly in a prescribed cycle;
 - a detection resistor, connected to the pulse signal generator and the power source;
 - a coupling capacitor, connected to the detecting resistor in series;
 - an integrator, integrating a difference between a first reference voltage and a detection voltage of the pulse signal at a connecting point of the detection resistor and the coupling capacitor over an integration interval; and
 - a ground-fault determinant, judging whether a ground fault ~~is~~ has occurred on the basis of an output of the integrator,wherein the integration interval has at least part of a high-level interval ~~and~~ or a low-level interval of the pulse signal.
2. (original): The ground-fault detecting device as set forth in claim 1, wherein the integrator includes:
 - an integration circuit, integrating the difference between the detection voltage and the first reference voltage; and

an integration reset signal generation circuit, generating a reset signal for rendering the integration circuit in a reset state over intervals other than the integration interval on the basis of the pulse signal supplied from the pulse signal generator.

3. (original): The ground-fault detecting device as set forth in claim 1, wherein the ground-fault determinant is a hysteresis comparator which compares the output of the integrator with a second reference voltage for obtaining a ground-fault detection output.

4. (original): The ground-fault detecting device as set forth in claim 1, wherein the ground-fault determinant is a sample-and-hold circuit which sample-and-holds the output of the integrator as an integration value for obtaining a ground-fault detection output.

5. (original): The ground-fault detecting device as set forth in claim 1, further comprising a compensation capacitor, having a capacitance corresponding to a vehicle-side capacitance, and provided between the vehicle body and the coupling capacitor.

6. (currently amended): An insulation resistance measuring device, comprising:
a power source;
an insulation resistance, electrically insulating the power source from a vehicle body;
a pulse signal generator, generating a pulse signal having a high level and a low level
which ~~are appeared~~ appear repeatedly in a prescribed cycle;
a detection resistor, connected to the pulse signal generator and the power source;

a coupling capacitor, connected to the detecting resistor in series;

an integrator, integrating a difference between a first reference voltage and a detection voltage of the pulse signal at a connecting point of the detection resistor and the coupling capacitor over an integration interval; and

an A/D converter, A/D converting an output of the integrator as an integration value so as to generate a digital value corresponding to a resistance value of the insulation resistance,

wherein the integration interval has at least part of a high-level interval ~~and~~or a low-level interval of the pulse signal.

7. (currently amended): The insulation resistance measuring device as set forth in claim 6, further comprising a ground-fault determinant, judging whether a ground fault ~~is~~has occurred on the basis of an output of the integrator.

8. (new): The insulation resistance measuring device as set forth in claim 6, further comprising a compensation capacitor, having a capacitance corresponding to a vehicle-side capacitance, and provided between the vehicle body and the coupling capacitor.

9. (new): The ground-fault detecting device as set forth in claim 1, wherein the integrator comprises an operational amplifier, a switch, and a reset signal generation circuit.

10. (new): The insulation resistance measuring device as set forth in claim 6, wherein the integrator comprises an operational amplifier, a switch, and a reset signal generation circuit.